

GCCGCGGCGCCCGAGGCGGGAGCAAGAGGCGCCGGGAGCCGCGAGGATCCACC
 GCCGCCGCGCGCGCCATGGAGCCCGAGTGAGCGCGCGGCGCTCCCGGCCGCGCG
 GACGACATGGAAACGGCGCCGACCCGGGCCCTCCGCCGCGCGCGCGCGCGCT
 GCTGCTGCTGGTGCTGTACTGCAGCTTGGTCCCCGCGCGGGCCTCACCCTCC
 TGTGTTTGGCCAACCGCCGGGATGTGCGGCTAGTGGATGCCGGCGGAGTGAAG
 CTGGAGTCCACCATTGTGGCCAGTGGCCTGGAGGATGCAGCTGCTGTAGACTT
 CCAGTTCTCCAAGGGTGCTGTGTACTGGACAGATGTGAGCGAGGAGGCCATCA
 AACAGACCTACCTGAACCAGACTGGAGCTGCTGCACAGAACATTGTATCTCG
 GGCCTCGTGTCACCTGATGGCCTGGCCTGTGACTGGGTTGGCAAGAAGCTGTA
 CTGGACGGACTCCGAGACCAACCGCATTGAGGTTGCCAACCTCAATGGGACGT
 CCCGTAAGGTTCTCTTCTGGCAGGACCTGGACCAGCCAAGGGCCATTGCCCTG
 GATCCTGCACATGGGTACATGTACTGGACTGACTGGGGGGAAGCACCCCGGAT
 CGAGCGGGCAGGGATGGATGGCAGTACCCGGAAGATCATTTAGACTCCGACA
 TTTACTGGCCCAATGGGCTGACCATCGACCTGGAGGAACAGAAGCTGTACTGG
 GCCGATGCCAAGCTCAGCTTCATCCACCGTGCCAACCTGGACGGCTCCTTCCG
 GCAGAAGGTGGTGGAGGGCAGCCTCACTCACCTTTTGCCCTGACACTCTCTG
 GGGACACACTCTACTGGACAGACTGGCAGACCCGCTCCATCCACGCCTGCAAC
 AAGTGGACAGGGGAGCAGAGGAAGGAGATCCTTAGTGCTCTGTACTCACCCAT
 GGACATCCAAGTGCTGAGCCAGGAGCGGCAGCCTCCCTTCCACACACCATGCG
 AGGAGGACAACGGTGGCTGTTCCACCTGTGCCTGCTGTCCCCGAGGGAGCCT
 TTCTACTCCTGTGCCTGCCCCACTGGTGTGCAGTTGCAGGACAATGGCAAGAC
 GTGCAAGACAGGGGCTGAGGAAGTGCTGCTGCTGGCTCGGAGGACAGACCTGA
 GGAGGATCTCTCTGGACACCCCTGACTTCACAGACATAGTGCTGCAGGTGGGC
 GACATCCGGCATGCCATTGCCATTGACTACGATCCCCTGGAGGGCTACGTGTA
 CTGGACCGATGATGAGGTGCGGGCTATCCGCAGGGCGTACCTAGATGGCTCAG
 GTGCGCAGACACTTGTGAACACTGAGATCAATGACCCCGATGGCATTGCTGTG
 GACTGGGTGCCCCGGAACCTCTACTGGACAGATACAGGCACTGACAGAATTGA
 GGTGACTCGCCTCAACGGCACCTCCCGAAAGATCCTGGTATCTGAGGACCTGG
 ACGAACC GCGAGCCATTGTGTTGCACCTGTGATGGGCCTCATGTACTGGACA
 GACTGGGGGGAGAACCCCAAAATCGAATGCGCCAACCTAGATGGGAGAGATCG
 GCATGTCCTGGTGAACACCTCCCTTGGGTGGCCCAATGGACTGGCCCTGGACC
 TGCAGGAGGGCAAGCTGTACTGGGGGGATGCCAAAACCTGATAAAATCGAGGTG
 ATCAACATAGACGGGACAAAGCGGAAGACCTGCTTGAGGACAAGCTCCACACA
 CATTTTTGGGTTTCACTGCTGGGGGACTTCATCTACTGGACCGACTGGCAGA
 GACGCAGTATTGAAAGGGTCCACAAGGTCAAGGCCAGCCGGGATGTCATCATT
 GATCAACTCCCCGACCTGATGGGACTCAAAGCCGTGAATGTGGCCAAGGTTGT
 CGGAACCAACCCATGTGCGGATGGAAATGGAGGGTGCAGCCATCTGTGCTTCT
 TCACCCACGTGCCACCAAGTGTGGCTGCCCCATTGGCCTGGAGCTGTTGAGT
 GACATGAAGACCTGCATAATCCCCGAGGCCTTCTGGTATTCACCAGCAGAGC
 CACCATCCACAGGATCTCCCTGGAGACTAACAACAACGATGTGGCTATCCCAC
 TCACGGGTGTCAAAGAGGCCTCTGCACTGGACTTTGATGTGTCCAACAATCAC

FIGURE 1A

ATCTACTGGACTGATGTTAGCCTCAAGACGATCAGCCGAGCCTTCATGAATGG
 GAGCTCAGTGGAGCACGTGATTGAGTTTGGCCTCGACTACCCTGAAGGAATGG
 CTGTGGACTGGATGGGCAAGAACCTCTATTGGGCGGACACAGGGACCAACAGG
 ATTGAGGTGGCCCGGCTGGATGGGCAGTTCCGGCAGGTGCTTGTGTGGAGAGA
 CCTTGACAACCCCAGGTCTCTGGCTCTGGATCCTACTAAAGGCTACATCTACT
 GGA CTGAGTGGGGTGGCAAGCCAAGGATTGTGCGGGCCTTCATGGATGGGACC
 AATTGTATGACACTGGTAGACAAGGTGGGCGGGCCAACGACCTCACCATTGA
 TTATGCCGACCAGCGACTGTACTGGACTGACCTGGACACCAACATGATTGAGT
 CTTCCAACATGCTGGGTGAGGAGCGCATGGTGATAGCTGACGATCTGCCCTAC
 CCGTTTGGCCTGACTCAATATAGCGATTACATCTACTGGACTGACTGGAACCT
 GCATAGCATTTGAACGGGCGGACAAGACCAGTGGGCGGAACCGCACCCCTCATCC
 AGGGTCACCTGGACTTCGTTCATGGACATCCTGGTGTTCCTCCTCCCGTCAG
 GATGGCCTCAACGACTGCGTGCACAGCAATGGCCAGTGTGGGCAGCTGTGCCT
 CGCCATCCCCGGAGGCCACCGCTGTGGCTGTGCTTCACACTACACGCTGGACC
 CCAGCAGCCGCAACTGCAGCCCGCCCTCCACCTTCTTGCTGTTTCAGCCAGAAA
 TTTGCCATCAGCCGGATGATCCCCGATGACCAGCTCAGCCCGGACCTTGTCT
 ACCCCTTCATGGGCTGAGGAACGTCAAAGCCATCAACTATGACCCGCTGGACA
 AGTTCATCTACTGGGTGGACGGGCGCCAGAACATCAAGAGGGCCAAGGACGAC
 GGTACCCAGCCCTCCATGCTGACCTCTCCAGCCAAAGCCTGAGCCGAGACAG
 ACAGCCACACGACCTCAGCATTTGACATCTACAGCCGGACACTGTTCTGGACCT
 GTGAGGCCACCAACACTATCAATGTCCACCGGCTGGATGGGGATGCCATGGGA
 GTGGTGCTTCGAGGGGACCGTGACAAGCCAAGGGCCATTGCTGTCAATGCTGA
 GCGAGGGTACATGTACTTTACCAACATGCAGGACCATTGCTGCCAAGATCGAGC
 GAGCCTCCCTGGATGGCACAGAGCGGGAGGTCTCTTCACCACAGGCCTCATC
 CGTCCCGTGGCCCTTGTGGTGGACAATGCTCTGGGCAAGCTCTTCTGGGTGGA
 TGCCGACCTAAAGCGAATCGAAAGCTGTGACCTCTCTGGGGCCAACCGCCTGA
 CCCTGGAAGATGCCAACATCGTACAGCCAGTAGGTCTGACAGTGCTGGGCAGG
 CACCTCTACTGGATCGACCGCCAGCAGCAGATGATCGAGCGCGTGGAGAAGAC
 CACTGGGGACAAGCGGACTAGGGTTGAGGGCCGTGTCACCCACCTGACAGGCA
 TCCATGCCGTGGAGGAAGTCAGCCTGGAGGAGTTCTCAGCCCATCCTTGTGCC
 CGAGACAATGGCGGCTGCTCCACATCTGTATCGCCAAGGGTGATGGAACACC
 GCGCTGCTCGTGCCCTGTCCACCTGGTGCTCCTGCAGAACCTGCTGACTTGTG
 GTGAGCCTCCTACCTGCTCCCTGATCAGTTTGCATGTACCACTGGTGAGATC
 GACTGCATCCCCGGAGCCTGGCGCTGTGACGGCTTCCCTGAGTGTGCTGACCA
 GAGTGATGAAGAAGGCTGCCCAGTGTGCTCCGCCTCTCAGTTCCCCTGCGCTC
 GAGGCCAGTGTGTGGACCTGCGGTTACGCTGCGACGGTGAGGCCGACTGCCAG
 GATCGCTCTGATGAAGCTAACTGCGATGCTGTCTGTCTGCCCAATCAGTTCCG
 GTGCACCAGCGGCCAGTGTGTCCTCATCAAGCAACAGTGTGACTCCTTCCCCG
 ACTGTGCTGATGGGTCTGATGAGCTCATGTGTGAAATCAACAAGCCACCCTCT
 GATGACATCCCAGCCCACAGCAGTGCCATTGGGCCCCGTCATTGGTATCATCCT
 CTCCCTCTTCGTTCATGGGCGGGGTCTACTTTGTCTGCCAGCGTGTGATGTGCC

FIGURE 1B

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AGCGCTACACAGGGGCCAGTGGGGCCCTTTCCCCACGAGTATGTTGGTGGAGCC
CCTCATGTGCCTCTCAACTTCATAGCCCCAGGTGGCTCACAGCACGGTCCCTT
CCCAGGCATCCCGTGCAGCAAGTCCGTGATGAGCTCCATGAGCCTGGTGGGGG
GGCGCGGCAGCGTGCCCCCTCTATGACCGGAATCACGTCACTGGGGCCTCATCC
AGCAGCTCGTCCAGCACAAAGGCCACACTATATCCGCCGATCCTGAACCCACC
CCCGTCCCCGGCCACAGACCCCTCTCTCTACAACGTGGACGTGTTTTATTCTT
CAGGCATCCCGGCCACCGCTAGACCATAACAGGCCCTACGTCATTCGAGGTATG
GCACCCCCCAACAACACCGTGCAGCACAGATGTGTGTGACAGTGACTACAGCAT
CAGTCGCTGGAAGAGCAGCAAATACTACCTGGACTTGAATTCGGACTCAGACC
CCTACCCCCCCCCCGCCCCACCCCCACAGCCAGTACCTATCTGCAGAGGACAGC
TGCCCAACCCTCACCAGGCACTGAGAGGAGTTACTGCCACCTCTTCCCGCCCCC
ACCGTCCCCCTGCACGGACTCGTCCTGACCTCGGCCGTCCACCCGGCCCTGCT
GCCTCCCTGTAAATATTTTTAAATATGAACAAAGGAAAAATATATTTTATGAT
TTAAAAAATAAATATAATTGGGGTTTTTAAACAAGTGAGAAATGTGAGCGGTGA
AGGGGTGGGCAGGGCTGGGAACTTTTCTAG (SEQ ID NO: 1)

FIGURE 1C

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METAPTRAPPPPPPLLLLVLVYCSLVPAAASPLLLFANRRDVRLVDAGGVKLE
 STIVASGLEDAAAVDFQFSKGAVYWTDVSEEAIKQTYLNQTGAAAQNIVISGL
 VSPDGLACDWVGKKLYWTDSETNRIEVANLNGTSRKVLFWQDLQDQPRALDP
 AHGYMYWTDWGEAPRIERAGMDGSTRKIIIVDSDIYWPNGLTIDLEEQKLYWAD
 AKLSFIHRANLDGSFRQKVVEGSLTHPFALTLSGDTLYWTDWQTRSIHACNKW
 TGEQRKEILSALYSPMDIQVLSQERQPPFHTPCEEDNNGGCSHLCLLSPREPFI
 SCACPTGVQLQDNGKTCKTGAEVLLARRTDLRRISLDTPDFTDIVLQVGD
 RHAIAIDYDPLEGYVYWTDDEVRAIRRAYLDGSGAQTLVNTEINDPDGIAVDW
 VARNLYWTDGTGDRIEVTRLNGTSRKILVSEDLDEPRAIVLHPVMGLMYWTDW
 GENPKIECANLDGRDRHVLVNTSLGWPNGLALDLQEGKLYWGDADTKIEVIN
 IDGTRKKTLLLEDKLPHFIFGFTLLGDFIYWTDWQRRSIERVHKVKASRDVIIDQ
 LPDLMGLKAVNVAKVVGTPNCPADGNGGCSHLCTFTPRATKCGCPIGLELLSDM
 KTCIIPEAFVFTSRATIHRIISLETNNNDVAIPLTGVEKASALDFDVSNNHIY
 WTDVSLKTISRFRMNGSSVEHVIEFGLDYPEGMAVDWMGKNLYWADTGTNRIE
 VARLDGQFRQVLVWRDLNPRSLALDPTKGYIYWTEWGGKPRIVRAFMDGTNC
 MTLVDKVGRANDLTIDYADQRLYWTDLDTNMIESNNMLGQERMVIADDLPPFP
 GLTQYSDYIYWTDWNLHSIERADKTSGRNRTLIQGHLDVMDILVFHSSRQDG
 LNDVHNSNGQCGQLCLAIIPGGHRCGCASHYTLDPSSRNCSPSTFLLFSQKFA
 ISRMIPDDQLSPDLVPLHGLRNVKAINYDPLDKFIYWVDGRQNIKRAKDDGT
 QPSMLTSPSQSLSPDRQPHDLSIDIYSRTLFWTCEATNTINVHRLDGDAMGVV
 LRGDRLKPRAIAVNAERGYMYFTNMQDHAAKIERASLDGTEREVLFTTGLIRP
 VALVVDNALGKLFWVDADLKRIESCDLSGANRLTLEDANIVQPVGLTVLGRHL
 YWIDRQQQMIEERVEKTTGDKRTRVQGRVTHLTGIIHAVEEVSLEEFSAHPCARD
 NGGCSHICIAKGDGTPRCSCPVLVLLQNL LTCGEPPTCSPDQFACTTGEIDC
 IPGAWRCDGFPECADQSDDEGCPVCSASQFPCARGQCVDLRLRCDGEADCQDR
 SDEANCDVCLPNQFRCTSGQCVLIKQCDSPDCADGSDELMCEINKPPSDD
 IPAHSSAIGPVIGIILSLFVMGGVYFVCQVRMCQRYTGASGPFPHYVGGAPH
 VPLNFIAPGGSQHGPFGIPCSKSVMSMSLVGGRGSVPLYDRNHVTGASSSS
 SSSTKATLYPPILNPPPPSPATDPSLYNVDVFYSSGIPATARPYPYVIRGMAP
 PTTPCSTDVCDSDYSISRWKSSKYLDLNSDSDPYPPPPPTPHSQYLSAEDSCP
 PSPGTERSCHLFPFPPSPCTDSS (SEQ ID NO: 2)

2

FIGURE 2

Construct

Gene: 193 GI Number(s): 6678715
 Gene Family: EGF domain protein
 Gene Subfamily: Low-density lipoprotein receptor
 Gene Sequence: full-length cDNA, Mouse

underlined = deleted in targeting construct

[] = sequence flanking Neo insert in targeting construct

GCCGCGGCGCCCGAGGCGGGAGCAAGAGGCGCGGGAGCCGCGAGGATCCACCGCCGCCG
 CGCGCGCCATGGAGCCCGAGTGAGCGCGCGCGCTCCCGGCCGCGGACGACATGGAAAC
 GGCGCCGACCCGGGCCCCCTCCGCGCGCGCGCGCGCGCTGCTGCTGCTGGTGTGTACTG
 CAGCTTGGTCCCGCGCGCGCGCTCACCCTCCTGTTGTTTGGCAACCGCCGGGATGTGCG
 GCTAGTGGATGCCGCGGAGTGAAGCTGGAGTCCACCATTGTGGCCAGTGGCCTGGAGGA
 TGCAGCTGCTGTAGACTTCCAGTTCTCCAAGGGTGTGTGTACTGGACAGATGTGAGCGA
 GGAGGCCATCAAACAGACCTACCTGAACCAGACTGGAGCTGCTGCACAGAACATTGTCAT
 CTCGGGCCTCGTGTACCTGATGGCCTGGCCTGTGACTGGGTGGCAAGAAGCTGTACTG
 GACGGACTCCGAGACCAACCGCATTGAGGTTGCCAACCTCAATGGGACGTCCCGTAAGGT
 TCTCTTCTGGCAGGACCTGGACCAGCCAAGGGCCATTGCCCTGGATCCTGCACATGGGTA
 CATGTACTGGACTGACTGGGGGAAGCACCCCGGATCGAGCGGGCAGGGATGGATGGCAG
 TACCCGGAAGATCATTGTAGACTCCGACATTTACTGGCCCAATGGGCTGACCATCGACCT
 GGAGGAACAGAAGCTGTACTGGGCGGATGCCAAGCTCAGCTTCATCCACCGTGCCAACT
 GGACGGCTCCTTCCGGCAGAAGGTGGTGGAGGGCAGCCTCACTCACCCCTTTTGCCCTGAC
 ACTCTCTGGGGACACACTCTACTGGACAGACTGGCAGACCCGCTCCATCCACGCTGCAA
 CAAGTGGACAGGGGAGCAGAGGAAGGAGATCCTTAGTGCTGTGTACTACCCATGGACAT
 CCAAGTGCTGAGCCAGGAGCGGCAGCCTCCCTTCCACACACCATGCGAGGAGGACAACGG
 TGGCTGTTCCACCTGTGCTGTGCTGCTCCCGAGGGAGCCTTTCTACTCCTGTGCTGCCC
 CACTGGTGTGCAGTTGCAGGACAATGGCAAGACGTGCAAGACAGGGGCTGAGGAAGTGCT
 GCTGCTGGCTCGGAGGACAGACTGAGGAGGATCTCTCTGGACACCCCTGACTTCACAGA
 CATAGTGCTGCAGGTGGGCGACATCCGGCATGCCATTGCCATTGACTACGATCCCTGGA
 GGGCTACGTGTACTGGACCGATGATGAGGTGCGGGCTATCCGCAGGGCGTACCTAGATGG
 CTCAGGTGCGCAGACACTTGTGAACACTGAGATCAATGACCCCGATGGCATTGCTGTGGA
 CTGGGTGCCCCGGAACCTCTACTGGACAGATACAGGCACTGACAGAATTGAGGTGACTCG
 CCTCAACGGCACCTCCCGAAAGATCCTGGTATCTGAGGACCTGGACGAACCGCGAGCCAT
 TGTGTTGCACCCCTGTGATGGGCCTCATGTACTGGACAGACTGGGGGGAGAACCCCAAAAT
 CGAATGCGCCAACCTAGATGGGAGAGATCGGCATGTCTGGTGAACACCTCCCTTGGGTG
 GCCCAATGGACTGGCCCTGGACCTGCAGGAGGGCAAGCTGTACTGGGGGGATGCCAAAAC
 TGATAAAATCGAGGTGATCAACATAGACGGGACAAAGCGGAAGACCTGCTTGAGGACAA
 GCTCCACACATTTTGGGTTACACTGCTGGGGGACTTCATCTACTGGACCGACTGGCA
 GAGACGCAGTATTGAAAGGTTCCACAAGGTCAAGGCCAGCCGGGATGTCATCATTGATCA
 ACTCCCCGACCTGATGGGACTCAAAGCCGTGAATGTGGCCAAGGTTGTGCGAACCACCC
 ATGTGCGGATGGAAATGGAGGTTGCAGCCATCTGTGCTTCTTACCCACGTTGCCACCAA
 GTGTGGCTGCCCATTTGGCCTGGAGCTGTTGAGTGACATGAAGACCTGCATAATCCCCGA
 GGCCTTCTGGTATTCACCAGCAGAGCCACCATCCACAGGATCTCCCTGGAGACTAACAA
 CAACGATGTGGCTATCCCACTCACGGGTGTCAAAGAGGCCTCTGCACTGGACTTTGATGT
 GTCCAACAATCACATCTACTGGACTGATGTTAGCCTCAAGACGATCAGCCGAGCCTTCAT
 GAATGGGAGCTCAGTGGAGCAGCTGATGAGTTTGGCCTCGACTACCTGAAGGAATGGC
 TGTGGACTGGATGGGCAAGAACCTCTATTGGGCGGACACAGGGACCAACAGGATTGAGGT
 GGCCCGGCTGGATGGGCAAGTTCCGGCAGGTGCTTGTGTGGAGAGACCTTGACAACCCAG
 GTCTCTGGCTCTGGATCCTACTAAAGGCTACATCTACTGGACTGAGTGGGTGGCAAGCC
 AAGGATTGTGCGGGCCTTCATGGATGGGACCAATTGTATGACACTGGTAGACAAGGTGGG
 CCGGGCCAACGACCTCACCATTTGATTATGCCGACCAGCGACTGTACTGGACTGACCTGGA
 CACCAACATGATTTGAGTCTTCCAAACATGCTGGGTGAGGAGCGCATGCTGATAGCTGACGA

FIGURE 3A

TCTGCCCTACCCGTTTGGCCTGACTCAATATAGCGATTACATCTACTGGACTGACTGGAA
 CCTGCATAGCATTGAACGGGGCGGACAAGACCAGTGGGCGGAACCGCACCCCTCATCCAGGG
 TCACCTGGACTTCGTCATGGACATCCTGGTGTTCCTCCTCCCGTCAGGATGGCCTCAA
 CGACTGCGTGACAGCAATGGCCAGTGTGGGCAGCTGTGCTCGCCATCCCCGGAGGCCA
 CCGCTGTGGCTGTGCTTTCACACTACACGCTGGACCCAGCAGCCGCAACTGCAGCCCGCC
 CTCCACCTTCTTGCTGTTTACGCCAGAAATTTGCCATCAGCCGGATGATCCCCGATGACCA
 GCTCAGCCCGGACCTTGTCTTACCCCTTCATGGGCTGAGGAACGTCAAAGCCATCAACTA
 TGACCCGCTGGACAAGTTCATCTACTGGGTGGACGGGCGCCAGAACATCAAGAGGGCCAA
 GGACGACGGTACCCAGCCCTCCATGCTGACCTCTCCAGCCAAAGCCTGAGCCAGACAG
 ACAGCCACACGACCTCAGCATTGACATCTACAGCCGACACTGTTCTGGACCTGTGAGGC
 CACCAACACTATCAATGTCCACCGGCTGGATGGGGATGCCATGGGAGTGGTGTCTCGAGG
 GGACCGTGACAAGCCAAGGGCCATTGCTGTCAATGCTGAGCGAGGGTACATGTACTTTAC
 CAACATGCAGGACCATGCTGCCAAGATCGAGCGAGCCTCCCTGGATGGCACAGAGCGGGA
 GGTCCCTCTTACCACAGGCCCTCATCCGTCCCGTGGCCCTTGTGGTGGACAATGCTCTGGG
 CAAGCTCTTCTGGGTGGATGCCGACCTAAAGCGAATCGAAAGCTGTGACCTCTCTG [GGG
 CCAACCGCTGACCTGGAAGATGCCAACATCGTACAGCCAGTAGGTCTGACAGTGTGG
 GCAGGCACCTCTACTGGATCGACCGCCAGCAGCAGATGATCGAGCGCTGGAGAAGACC]
ACTGGGGACAAGCGGACTAGGGTTCAGGGCCGTGTCAACCCACC [TGACAGGCATCCATGC
 CGTGGAGGAAGTCAGCCTGGAGGAGTTCT] CAGCCCATCCTTGTGCCCCGAGACAATGGCG
 GCTGCTCCACATCTGTATCGCCAAGGGTGATGGAACACCGCGCTGCTCGTGCCCTGTCC
 ACCTGGTGTCTCTGCGAGAACCTGCTGACTTGTGGTGAGCCTCCTACCTGCTCCCCGTGATC
 AGTTTGCATGTACCACCTGGTGAGATCGACTGCATCCCCGGAGCCTGGCGCTGTGACGGCT
 TCCCTGAGTGTGCTGACCAGAGTGTGAAGAAGGCTGCCAGTGTGCTCCGCCTCTCAGT
 TCCCCTGCGCTCGAGGCCAGTGTGTGGACCTGCGGTTACGCTGCGACGGTGAGGCCGACT
 GCCAGGATCGCTCTGATGAAGCTAACTGCGATGCTGTCTGTCTGCCCAATCAGTTCCGGT
 GCACCAAGCGGCCAGTGTGCTCATCAAGCAACAGTGTGACTCCTTCCCCGACTGTGCTG
 ATGGGTCTGATGAGCTCATGTGTGAAATCAACAAGCCACCCTCTGATGACATCCAGCCCC
 ACAGCAGTGCCATTGGGCGCGTCATTGGTATCATCCTCTCCCTCTTCGTCATGGGCGGGG
 TCTACTTTGTCTGCCAGCGTGTGATGTGCCAGCGCTACACAGGGGCCAGTGGGCCCTTTC
 CCCACGAGTATGTTGGTGGAGCCCCCTCATGTGCCTCTCAACTTCATAGCCCCAGTGGCT
 CACAGCACGGTCCCTTCCCAGGCATCCCGTGCAGCAAGTCCGTGATGAGCTCCATGAGCC
 TGGTGGGGGGGCGCGGCGAGCGTGGCCCTCTATGACCGGAATCACGTCACTGGGGCCTCAT
 CCAGCAGCTCGTCCAGCACAAAGGCCACACTATATCCGCCGATCCTGAACCCACCCCCGT
 CCCCGGCCACAGACCCCTCTCTCTACAACGTGGACGTGTTTATTCTTCAGGCATCCCCG
 CCACCGCTAGACCATACAGGCCCTACGTCAATTCGAGGTATGGCACCCCCAACAAACCCGT
 GCAGCACAGATGTGTGTGACAGTGAATGACAGCATCAGTCGCTGGAAGAGCAGCAAATACT
 ACCTGGACTTGAATTCGGACTCAGACCCCTACCCCCCCCCGCCCCCCCCACAGCCAGT
 ACCTATCTGCAGAGGACAGCTGCCCCCCTCACCAGGCACTGAGAGGAGTTACTGCCACC
 TCTTCCCGCCCCCACCCTCCCCCTGCACGGACTCGTCTGACCTCGGCCGTCCACCCGGC
 CCTGCTGCCTCCCTGTAAATATTTTAAATATGAACAAAGGAAAAATATATTTTATGATT
 TAAAAAATAAATATAATTGGGGTTTTTAACAAGTGAGAAATGTGAGCGGTGAAGGGGTGG
 GCAGGGCTGGGAAACTTTTCTAG

Gene Sequence
 Structure *

3659 bp

Sequence Deleted

3701 bp

Size of full-length
 cDNA: 5119 bp

FIGURE 3B

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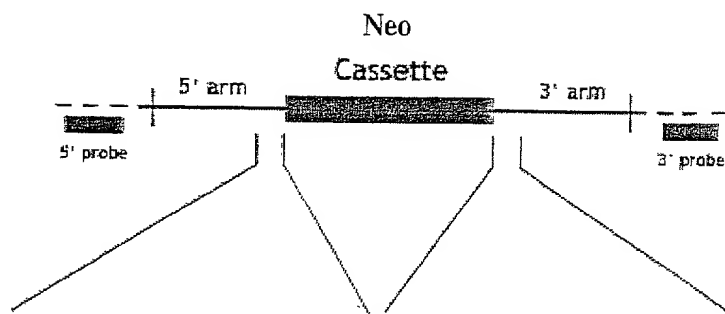
Targeting Vector* (genomic sequence)

Construct Number: 992

Arm Length:

5': 1.5 kb

3': 2.9 kb



<p>5' >AAATATGCATTATCCTGAGCA CAGTGGGTCTGGCCCTTCACTTGG CTGCCACTCATGGAGCCTTTATGC TAACCACAGGGGCCAACCGCCTGA CCCTGGAAGATGCCAACATCGTAC AGCCAGTAGGTCTGACAGTGCTGG GCAGGCACCTCTACTGGATCGACC GCCAGCAGCAGATGATCGAGCGTG TGGAGAAGACC<3' (SEQ ID NO: 3) 3</p>	<p>5' >TCACTGGCATCCATGCAGTG: AGGAAGTCAGCCTGGAGGAGTTCT GTACGTGAGAGGGGACAGTGTTTG TGGTGGGGTCTCCTGGGGGAAGGT GAATCAGCCCTACTGGCATCAGAT GGGCTGCTGGTGCAAGAGCAGTGT GCCTGAGGAGCTCATGGGCTCAGC ACCGAAGGCCAGTGCATGTCCAGA TGTCTGCCTCT<3' (SEQ ID NO: 4) 4</p>
---	---

Targeting Vector

Endogenous Locus

* Not drawn to scale

FIGURE 3C

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Phenotypic Data Summary - Open Field

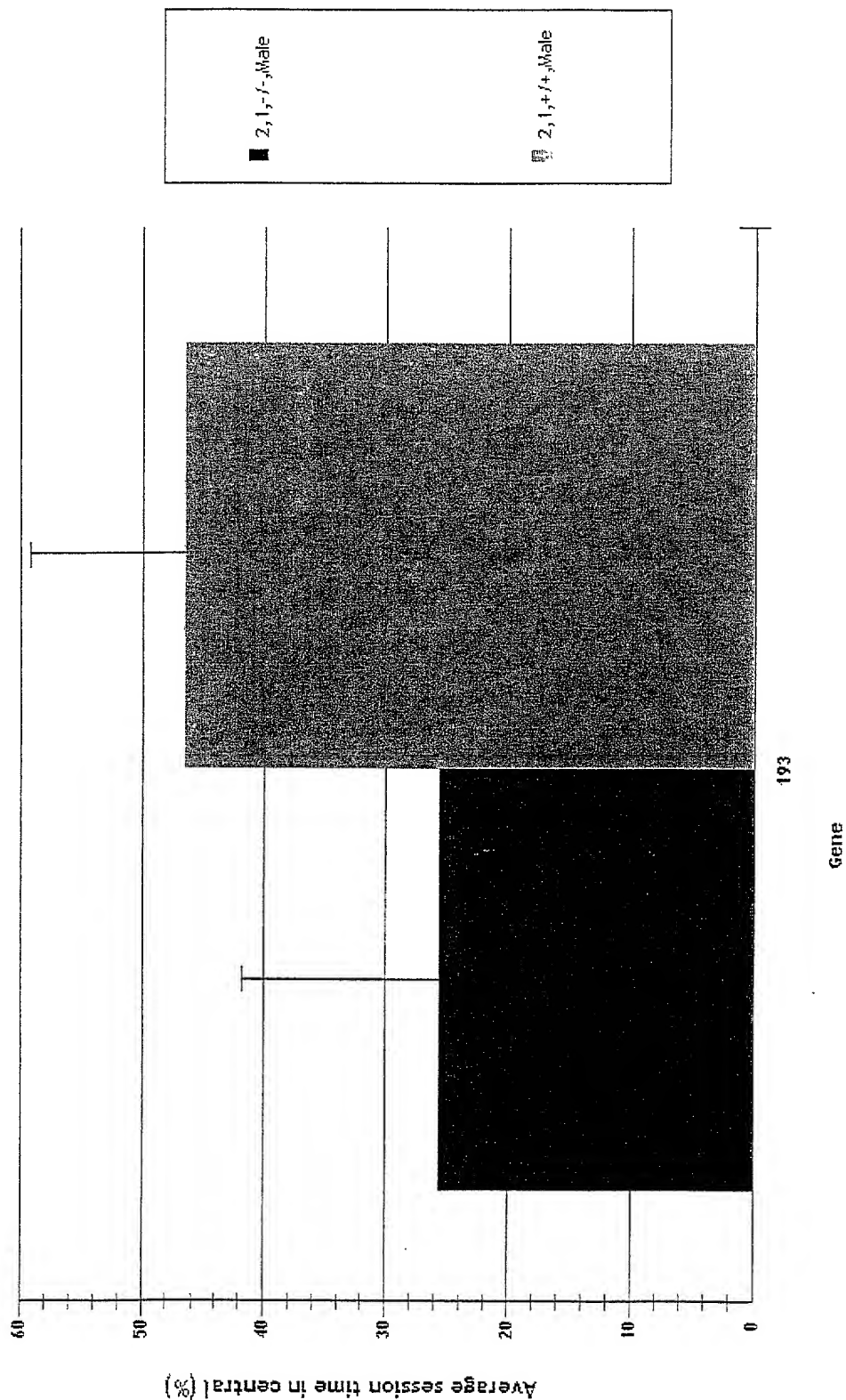


FIGURE 4

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Phenotypic Data Summary - Open Field

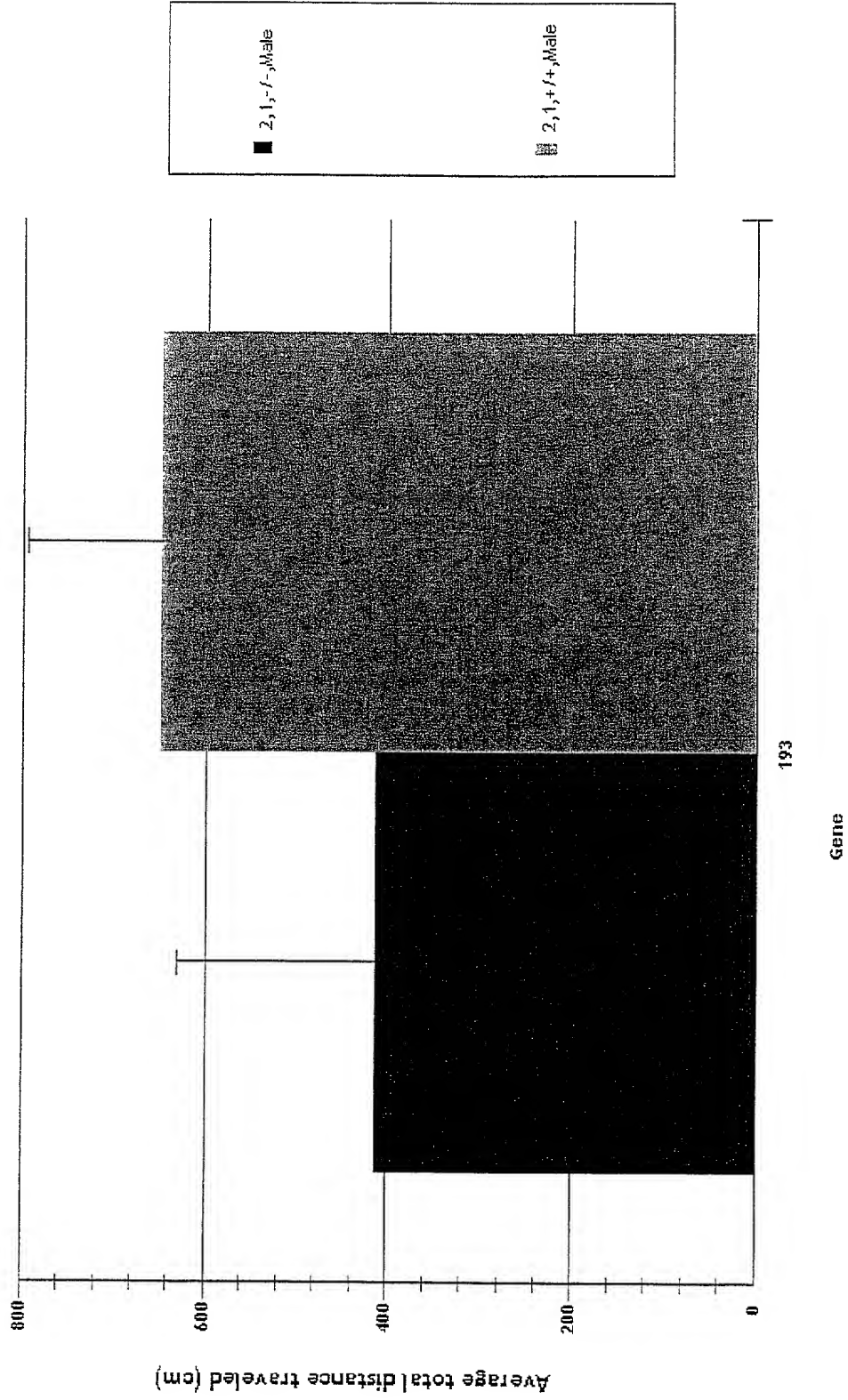


FIGURE 5